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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,983	10/28/2003	Bart Gerard Boucherie	BOUC3014/JEK	3976

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EXAMINER	
HUSON, MONICA ANNE	
ART UNIT	**PAPER NUMBER**
1732	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/693,983	BOUCHERIE, BART GERARD	
	Examiner	Art Unit	
	Monica A. Huson	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *17-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the Amendment filed 10 October 2006.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the original specification for the added limitation that "each time the first or second series of mold parts works in conjunction with the third series of mold parts", a first injection piece and a second injection piece is formed. Although applicant contends that his "each of the first, second, and third series 6, 9, 12 have half-cavities corresponding to both the first mold impressions 18 and the second mold impressions 19", support for this assertion cannot be located in the original specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application

> or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Bodmer et al. (U.S. Patent 6,783,346). Regarding Claim 1, Bodmer et al., hereafter "Bodmer," show that it is known to carry out a method for manufacturing injection molding pieces comprising two components wherein a first injection molding piece is formed of a first component in a first mold impression and a second injection molding piece is formed by putting the first injection molding piece in a second mold impression (Column 2, lines 38-58), and by providing a second component on the first injection molding piece, wherein a mold with at least three series of mold parts is used, namely a first series, a second series and a third series respectively, wherein every series has at least one first mold part which can form a wall for the first mold impression when forming a first injection molding piece, as well as at least one second mold part which can form a wall for the second mold impression when forming a second injection molding piece; wherein the first series of mold parts and the second series of mold parts can be alternately presented to work in conjunction with the third series of mold parts (Column 2, lines 54-65), in order to inject at least one first injection molding piece as well as at least one second injection molding piece in the mold impressions formed thereby each time the first or second series of mold parts works in conjunction with the third series of mold parts; and wherein, during the alternating presentation, a mutual repositioning of every first injection molding piece concerned is obtained, such that it ends up in the accompanying second mold impression (Figure 3, elements 21.1, 21.2, 34.1, 34.2, 34.3; Column6, lines 40-53).

Regarding Claim 2, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein aforesaid

repositioning is realized by changing the places of the first injection molding pieces after their production by removing them from a mold part with which they have been made into the other mold part which is part of the same series (Column 5, lines 1-19).

Regarding Claim 3, Bodmer shows the process as claimed as discussed in the rejection of Claim 2 above, including a method wherein said first injection molding pieces are moved by means of a transfer part which is active between the mold parts of the series concerned or by means of a robot (Column 5, lines 1-19, 59-66).

Regarding Claim 14, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein while the mold is being closed, at least one series of mold parts is kept outside the injection molding cycle (Figure 1).

Regarding Claim 15, Bodmer shows the process as claimed as discussed in the rejection of Claim 14 above, including a method wherein at the series of mold parts which is kept outside the injection molding cycle, at least a repositioning as mentioned above is realized (Figure 2).

Regarding Claim 16, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the first series of mold parts and the second series of mold parts alternately work in conjunction with the third series of mold parts by making the first and the second series on the one hand and the third series on the other hand alternately carry out a translation movement (Figures 1 and 2; Column 2, lines 54-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodmer, in view of Boucherie (U.S. Patent 6,379,139), hereafter "Boucherie '139".

Regarding Claim 4, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show leaving the mold first injection pieces when opening the mold on the mold part concerned of the first and second series. Boucherie '139 shows that it is known to carry out a method including a method wherein said repositioning is realized by leaving the first mold injection pieces, after their production, when opening the mold, on the mold part of the first series in which they have been made and on the mold part of the second series in which they have been made respectively, and by making sure that, at the next co-operation of the first series with the third series and of the second series with the third series respectively, the mutual position of the mold parts of the first series in relation to the third series, and of the mold parts of the second series in relation to the mold parts of the third series respectively, is changed (Column 3, lines 3-45; Column 4, lines 1-6). Boucherie '139 and Bodmer are combinable because they are concerned with a similar technical field, namely, methods of multistep molding using movable multicavity molds. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie '139's repositioning sequence during Bodmer's molding process in order to avoid the need for transfer mechanisms.

Regarding Claim 6, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including making use of a first series and a second series whose mold parts assume opposite positions (Figure 1), but he does not show leaving the mold first injection pieces when opening the mold on the mold part concerned of the third series. Boucherie '139 shows that it is

known to carry out a method wherein said repositioning is realized by leaving the first injection molding pieces after their making, when opening the mold on the mold part concerned of the third series (Column 3, lines 3-45; Column 4, lines 1-6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie '139's repositioning sequence during Bodmer's molding process in order to avoid the need for transfer mechanisms.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodmer and Boucherie '139, in view of Boucherie (EP 678 368). Bodmer shows the process as claimed as discussed in the rejection of Claim 4 above, but he does not show rotation of the first or second mold parts. Boucherie shows that it is known to carry out a method wherein the mutual position is changed by subjecting one or several of the first and second series of mold parts to a rotation, in particular in relation to a support upon which they have been provided (Column 3, lines 48-53). Boucherie and Bodmer are combinable because they are concerned with a similar technical field, namely, methods of multistep molding using movable multicavity molds. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's rotatable first and second molds during Bodmer's molding process in order to obtain varying cavity arrangements.

Claims 7-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodmer, in view of Boucherie.

Regarding Claim 7, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show mutual rotation of the molds. Boucherie shows that it is known to carry out a method wherein the first series of mold parts and the second series of mold parts alternately cooperate with the third series of mold parts by a rotational movement whereby

the first and second series are repositioned relative to the third series (Column 6, lines 38-58; Column 7, lines 1-10. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's rotatable molds during Bodmer's molding process in order to obtain varying cavity arrangements.

Regarding Claim 8, Bodmer shows the process as claimed as discussed in the rejection of Claim 7 above, but he does not show a specific axis of rotation that is parallel to the closing direction of the mold. Boucherie shows that it is known to carry out a method wherein the aforesaid rotational movement is realized around an axis of rotation which is parallel to the closing direction of the mold parts concerned (Figures 5 or 6's axes of rotation are parallel to the closing direction of the mold parts (See Figure 3 for partial side-view)). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's specific axis of rotation in Bodmer's molding process in order to accommodate specific space constrictions in the area of the mold processing.

Regarding Claim 9, Bodmer shows the process as claimed as discussed in the rejection of Claim 8 above, including a method wherein the third mold is rotatable on an axis inside first and second molds. It is being held that reversal of relative movement is an obvious choice for one of ordinary skill in the art (See MPEP 2144.04 VI (A)). Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have a third mold wherein first and second molds rotate around an axis outside the third mold in order to enable the production of articles that require exclusive rotation steps during their manufacture.

Regarding Claim 10, Bodmer shows the process as claimed as discussed in the rejection of Claim 7 above, including a method wherein use is made of a first series of mold parts and a second series of mold parts provided on a common supporting structure, whereby, from a general point of view, they are

mutually situated at an angle with their land areas, and whereby the first series of mold parts and the second series of mold parts can alternately be placed opposite to the third series of mold parts by rotating the aforesaid supporting structure around an axis of rotation which extends according to the bisector between the aforesaid two land areas (Figure 1), meeting applicant's claim.

Regarding Claim 11, Bodmer shows the process as claimed as discussed in the rejection of Claim 7 above, including a method wherein the third series of mold parts, in order to make them alternately work in conjunction with the first series and the second series, is rotated between the first series and the second series (Figure 1), meeting applicant's claim.

Regarding Claim 13, Bodmer shows the process as claimed as discussed in the rejection of Claim 11 above, including a method wherein use is made of a third series of mold parts which is at least split, such that two or more third series are created, such that when the mold parts close at every injection molding cycle, a third series co-operates with the first series, just as another third series co-operates with the second series (Column 6, lines 4-10; Figures 1-2), meeting applicant's claim.

Response to Arguments

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection. However, as noted above, the examiner believes that Bodmer shows the *amended* claimed limitations.

Applicant contends that Bodmer does not show the *amended* claimed limitations because the central series (i.e. third) mold parts each consist of two mold parts that are each provided with one type of half cavities 21.1 or 21.2. This is not persuasive because, in Bodmer's Figure 3, it is clear that his central series of mold parts (i.e. element 10, third mold part) contains *both* cavities

21.1 and 21.2. This mold configuration allows first and second mold pieces to be molded when either the first or second mold parts are joined to the third mold part.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica A Huson
December 20, 2006

CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER
12/21/06